METHOD CONTROL PARAMETERS

Method Information For: C:\MSDCHEM\1\METHODS\[(b)(7)]_RP1581_051914.M
Method Sections To Run:

( ) Save Copy of Method With Data
( ) Instrument Control Pre-Run Cmd/Macro =
( ) Data Analysis Pre-Run Cmd/Macro =
(X) Data Acquisition
(X) Data Analysis
( ) Instrument Control Post-Run Cmd/Macro =
( ) Data Analysis Post-Run Cmd/Macro =
Method Comments:

END OF METHOD CONTROL PARAMETERS

Quantitation method
[(b)(7)(C)] 8/11/14

INSTRUMENT CONTROL PARAMETERS: Enhanced

C:\MSDCHEM\1\METHODS\[redacted]RP1581_051914.M
Fri Aug 08 13:44:40 2014

Control Information

Sample Inlet	GC
Injection Source	GC ALS
Mass Spectrometer	Enabled

Oven

Equilibration Time	0.5 min
Oven Program	On
35 °C for 2 min	
then 20 °C/min to 325 °C for 3 min	
Run Time	19.5 min

Front Injector

Syringe Size	10 µL
Injection Volume	1 µL
Injection Repetitions	1
Solvent A Washes (PreInj)	2
Solvent A Washes (PostInj)	3
Solvent A Volume	8 µL
Solvent B Washes (PreInj)	2
Solvent B Washes (PostInj)	3
Solvent B Volume	8 µL
Sample Washes	1
Sample Wash Volume	8 µL
Sample Pumps	3
Dwell Time (PreInj)	0 min
Dwell Time (PostInj)	0 min
Solvent Wash Draw Speed	300 µL/min
Solvent Wash Dispense Speed	6000 µL/min
Sample Wash Draw Speed	300 µL/min
Sample Wash Dispense Speed	6000 µL/min
Injection Dispense Speed	6000 µL/min
Viscosity Delay	0 sec
Sample Depth Disabled	

Back Injector

Syringe Size	10 µL
Injection Volume	1 µL
Injection Repetitions	1
Solvent A Washes (PreInj)	0
Solvent A Washes (PostInj)	0
Solvent A Volume	8 µL
Solvent B Washes (PreInj)	0
Solvent B Washes (PostInj)	0
Solvent B Volume	8 µL
Sample Washes	0
Sample Wash Volume	8 µL
Sample Pumps	6
Dwell Time (PreInj)	0 min
Dwell Time (PostInj)	0 min
Solvent Wash Draw Speed	300 µL/min
Solvent Wash Dispense Speed	6000 µL/min
Sample Wash Draw Speed	300 µL/min
Sample Wash Dispense Speed	6000 µL/min
Injection Dispense Speed	6000 µL/min
Viscosity Delay	0 sec
Sample Depth Disabled	

Front SS Inlet He		
Mode	Split	
Heater	On	275 °C
Pressure	On	16.494 psi
Total Flow	On	114.93 mL/min
Septum Purge Flow	On	3 mL/min
Gas Saver	On	30 mL/min After 2 min
Split Ratio	20 :1	
Split Flow	106.6 mL/min	

Back SS Inlet He		
Mode	Split	
Heater	Off	
Pressure	Off	
Total Flow	Off	
Septum Purge Flow	Off	
Gas Saver	Off	
Split Ratio	100 :1	
Split Flow	277.4 mL/min	

Column #1

450 °C: 25 m x 320 µm x 0 µm
In: Front SS Inlet He
Out: Front Detector TCD

(Initial)	35 °C
Pressure	16.494 psi
Flow	5.3298 mL/min
Average Velocity	70.102 cm/sec
Holdup Time	0.59437 min
Flow Program	Off
5.3298 mL/min for 0 min	
Run Time	19.5 min

Column #2

450 °C: 25 m x 320 µm x 0 µm
In: Back SS Inlet He
Out: Front Detector TCD

(Initial)	35 °C
Pressure	10 psi
Flow	2.774 mL/min
Average Velocity	43.399 cm/sec
Holdup Time	0.96009 min
Pressure Program	Off
10 psi for 0 min	
Run Time	19.5 min

Front Detector TCD		
Heater	On	300 °C
Reference Flow	Off	
Makeup Flow	On	20 mL/min
Const Col + Makeup	Off	
Negative Polarity	Off	
Filament	Off	

Signals
Front Signal Save On
Test Plot Save On
Test Plot Save On
Test Plot Save On

MS ACQUISITION PARAMETERS

General Information
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Tune File : dftppnew051614.u
Acquistion Mode : Scan

MS Information
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Solvent Delay : 3.50 min

EMV Mode : Relative
Relative Voltage : -71

[Scan Parameters]

Low Mass : 35.0
High Mass : 500.0
Threshold : 50
Sample # : 3 A/D Samples 8
Plot 2 low mass : 50.0
Plot 2 high mass : 550.0

[MSZones]

MS Source : 230 C maximum 250 C
MS Quad : 150 C maximum 200 C

END OF MS ACQUISITION PARAMETERS

TUNE PARAMETERS for SN: <offline>

Trace Ion Detection is OFF.

EMISSION : 34.600
ENERGY : 70.000
REPELLER : 29.960
IONFOCUS : 90.200
ENTRANCE_LE : 0.000
EMVOLTS : 1200.000
Actual EMV : -1
GAIN FACTOR : <Unable to calculate gain facto
r.>
AMUGAIN : 4095.000
AMUOFFSET : 255.000
FILAMENT : 1.000
DCPOLARITY : 0.000
ENTLENSOFFS : 25.100
MASSGAIN : -2048.000
MASSOFFSET : -499.000

END OF TUNE PARAMETERS

END OF INSTRUMENT CONTROL PARAMETERS

DATA ANALYSIS PARAMETERS

Method Name: C:\MSDCHEM\1\METHODS\[redacted]RP1581_051914.M

Percent Report Settings

Sort By: Signal

Output Destination
Screen: No
Printer: No
File: No

Integration Events: Meth Default

Generate Report During Run Method: Yes

Signal Correlation Window: 0.020

Qualitative Report Settings

Peak Location of Unknown: Apex

Library to Search	Minimum Quality
C:\Database\NIST05a.L	0

Integration Events: Meth Default

Report Type: Summary

Output Destination
Screen: No
Printer: No
File: No

Generate Report During Run Method: Yes

Quantitative Report Settings

Report Type: Detailed

Output Destination
Screen: No
Printer: Yes
File: epatemp.txt

Generate Report During Run Method: No

Freedom Industries
Calibration Last Updated: Wed Aug 06 11:32:39 2014

Reference Window: 2.00 Minutes
Non-Reference Window: 1.00 Minutes

Correlation Window: 0.10 minutes
Default Multiplier: 1.00
Default Sample Concentration: 0.00

Compound Information

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1) Cyclohexanol ( )

Ret. Time 4.613 min., Extract & Integrate from 4.113 to 5.113 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 57.10			*** METH DEFAULT ***
Q1 82.10	57.10	20.0	*** METH DEFAULT ***
Q2 67.10	43.80	20.0	*** METH DEFAULT ***

Lvl	ID	Conc (ug/mL)	Response
1		50.000	156539
2		50.000	155813
3		50.000	169255
4		50.000	157595
5		50.000	151352
6		50.000	168333
7		50.000	167964
8		50.000	163415

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

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2) MCHM (2 peaks combined) ( )

Ret. Time 6.530 min., Extract & Integrate from 6.030 to 7.030 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 55.10			*** METH DEFAULT ***
Q1 97.10	39.40	20.0	*** METH DEFAULT ***
Q2 81.10	30.30	20.0	*** METH DEFAULT ***

Lvl	ID	Conc (ug/mL)	Response
1		0.470	874
2		0.946	2156
3		2.840	7147
4		4.730	11471
5		9.460	22258
6		47.300	166406
7		94.600	367991
8		189.000	789691

Qualifier Peak Analysis ON
Curve Fit: Linear

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3) PPH ( )

Ret. Time 7.784 min., Extract & Integrate from 7.284 to 8.284 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 94.10			*** METH DEFAULT ***
Q1 77.10	23.70	20.0	*** METH DEFAULT ***
Q2 152.10	18.60	20.0	*** METH DEFAULT ***

Lvl	ID	Conc (ug/mL)	Response
1		0.470	604
2		0.946	1506
3		2.840	6257
4		4.730	10474
5		9.460	21573
6		47.300	189499
7		94.600	441478
8		189.000	1023617

Qualifier Peak Analysis ON
Curve Fit: Linear

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4) 1,4-CHDM ( )

Ret. Time 8.592 min., Extract & Integrate from 8.092 to 9.092 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 95.10			*** METH DEFAULT ***
Q1 67.10	41.40	20.0	*** METH DEFAULT ***
Q2 41.10	53.20	20.0	*** METH DEFAULT ***

Lvl	ID	Conc (ug/mL)	Response
1		0.470	280
2		0.946	545
3		2.840	2435
4		4.730	4360
5		9.460	8585
6		47.300	74923
7		94.600	188094
8		189.000	411739

Qualifier Peak Analysis ON
Curve Fit: Linear

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5) DMCH-1,4-DC ( )

Ret. Time 9.152 min., Extract & Integrate from 8.652 to 9.652 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 81.10			*** METH DEFAULT ***
Q1 108.10	36.20	20.0	*** METH DEFAULT ***
Q2 140.10	63.60	20.0	*** METH DEFAULT ***

Lvl	ID	Conc (ug/mL)	Response
1		0.470	646
2		0.946	1398
3		2.840	5114
4		4.730	7748
5		9.460	18343
6		47.300	130770
7		94.600	293609
8		189.000	639126

Qualifier Peak Analysis ON
Curve Fit: Linear

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6) di-PPH ( )

Ret. Time 9.856 min., Extract & Integrate from 9.356 to 10.356 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 59.10			*** METH DEFAULT ***
Q1 94.10	30.00	20.0	*** METH DEFAULT ***
Q2 210.20	9.00	20.0	*** METH DEFAULT ***

Lvl	ID	Conc (ug/mL)	Response
1		0.470	401
2		0.946	1017
3		2.840	2992
4		4.730	4799
5		9.460	11129
6		47.300	83676
7		94.600	214860
8		189.000	-1

Qualifier Peak Analysis ON
Curve Fit: Linear

END OF DATA ANALYSIS PARAMETERS

Fri Aug 08 13:44:41 2014

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\(b) (7)(C)\RP1581\
Data File : 051914_001.D
Acq On : 19 May 2014 11:42 am
Operator : (b) (7)(C)
Sample : DFTPP
Misc : DFTPP
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 11:31:39 2014
Quant Method : C:\msdchem\1\METHODS\(b) (7)(C)RP1581_051914.M
Quant Title : Freedom Industies
QLast Update : Wed Aug 06 11:28:36 2014
Response via : Initial Calibration

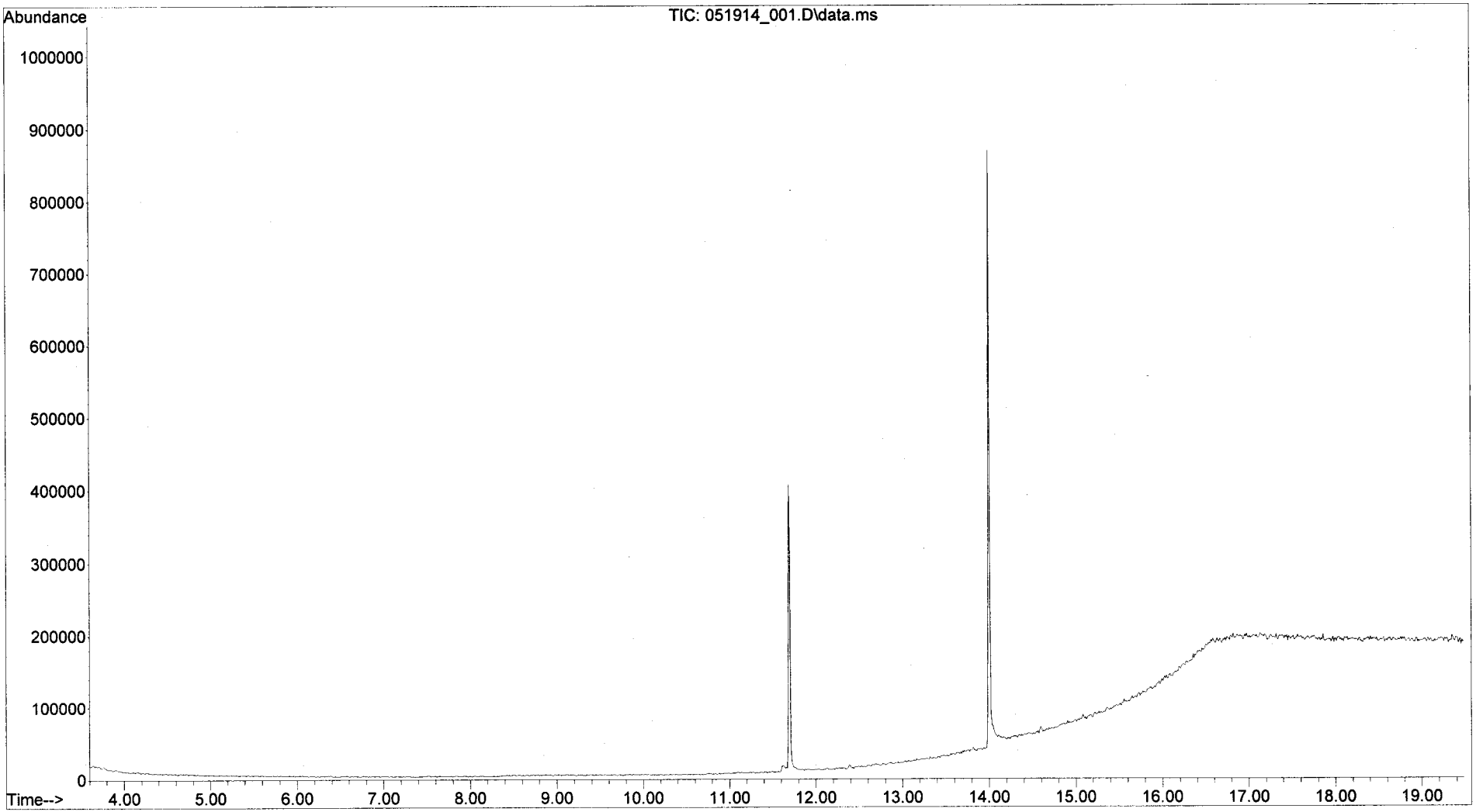
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
System Monitoring Compounds						
1) Cyclohexanol	0.000	57	0	0.00	ug/mL	
Target Compounds						Qvalue
2) MCHM (2 peaks combined)	0.000		0	N.D.		
3) PPH	0.000		0	N.D.		
4) 1,4-CHDM	0.000		0	N.D.		
5) DMCH-1,4-DC	0.000		0	N.D.		
6) di-PPH	0.000		0	N.D.		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA(b) (7)(C) RP1581\
Data File : 051914_001.D
Acq On : 19 May 2014 11:42 am
Operator :(b) (7)(C)
Sample :
Misc : DFTPP
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 11:31:39 2014
Quant Method : C:\msdchem\1\METHODS(b) (7)(C) P1581_051914.M
Quant Title : Freedom Industies
QLast Update : Wed Aug 06 11:28:36 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA[redacted]RP1581\
Data File : 051914_002.D
Acq On : 19 May 2014 12:17 pm
Operator : [redacted]
Sample : Blank
Misc : Blank
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 06 11:32:06 2014
Quant Method : C:\msdchem\1\METHODS[redacted]_RP1581_051914.M
Quant Title : Freedom Industies
QLast Update : Wed Aug 06 11:28:36 2014
Response via : Initial Calibration

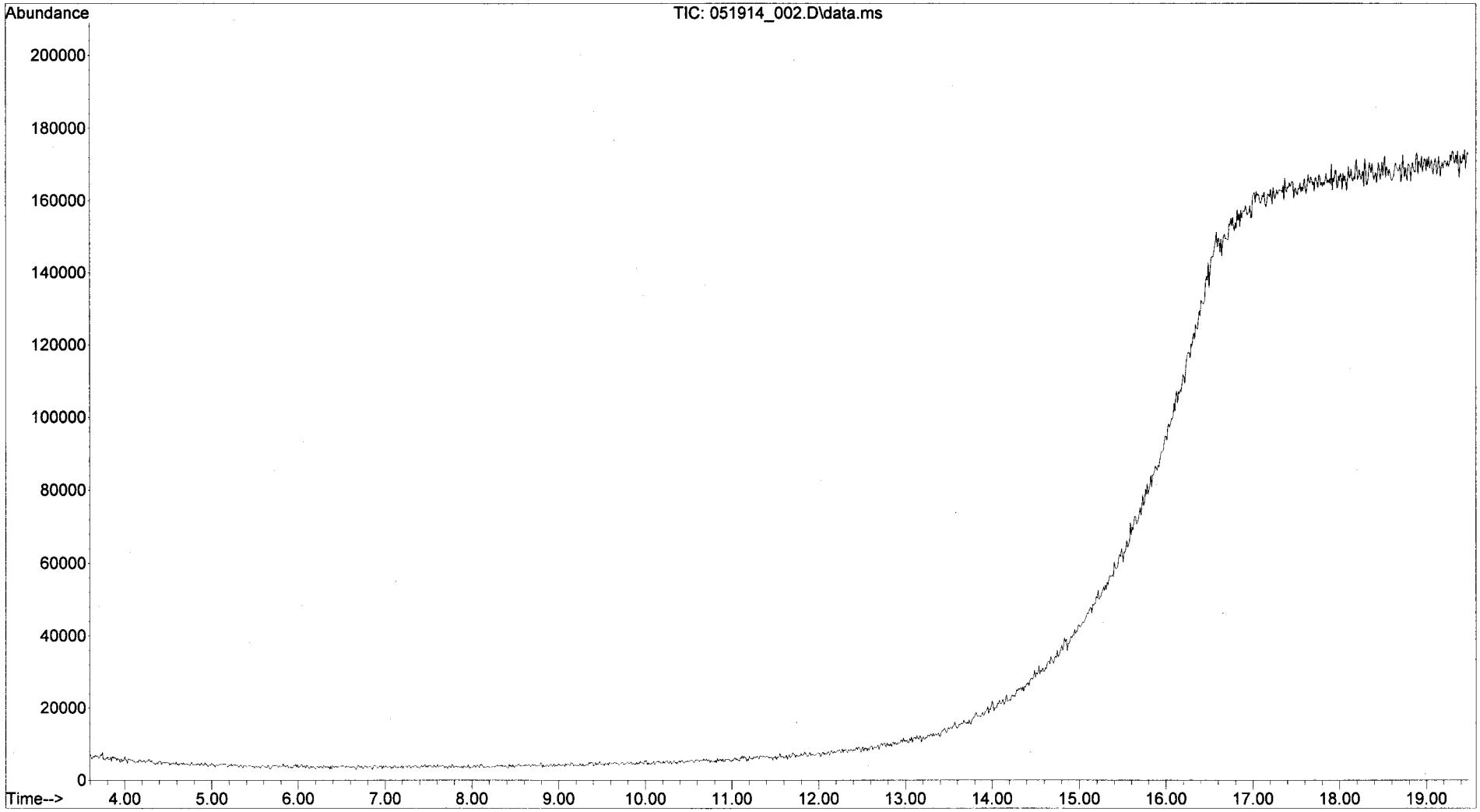
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
System Monitoring Compounds					
1) Cyclohexanol	0.000	57	0	0.00 ug/mL	
Target Compounds					Qvalue
2) MCHM (2 peaks combined)	0.000		0	N.D.	
3) PPH	0.000		0	N.D.	
4) 1,4-CHDM	0.000		0	N.D.	
5) DMCH-1,4-DC	0.000		0	N.D.	
6) di-PPH	0.000		0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA[redacted]RP1581\
Data File : 051914_002.D
Acq On : 19 May 2014 12:17 pm
Operator : [redacted]
Sample : [redacted]k
Misc : Blank
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 06 11:32:06 2014
Quant Method : C:\msdchem\1\METHODS[redacted]RP1581_051914.M
Quant Title : Freedom Industies
QLast Update : Wed Aug 06 11:28:36 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\(b) (7)(C)\RP1581\
Data File : 051914_003.D
Acq On : 19 May 2014 12:55 pm
Operator : (b) (7)(C)
Sample : 0.5 ug/mL
Misc : 0.5
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 06 11:40:07 2014
Quant Method : C:\msdchem\1\METHODS\(b) (7)(C)_RP1581_051914.M
Quant Title : Freedom Industies
QLast Update : Wed Aug 06 11:32:39 2014
Response via : Initial Calibration

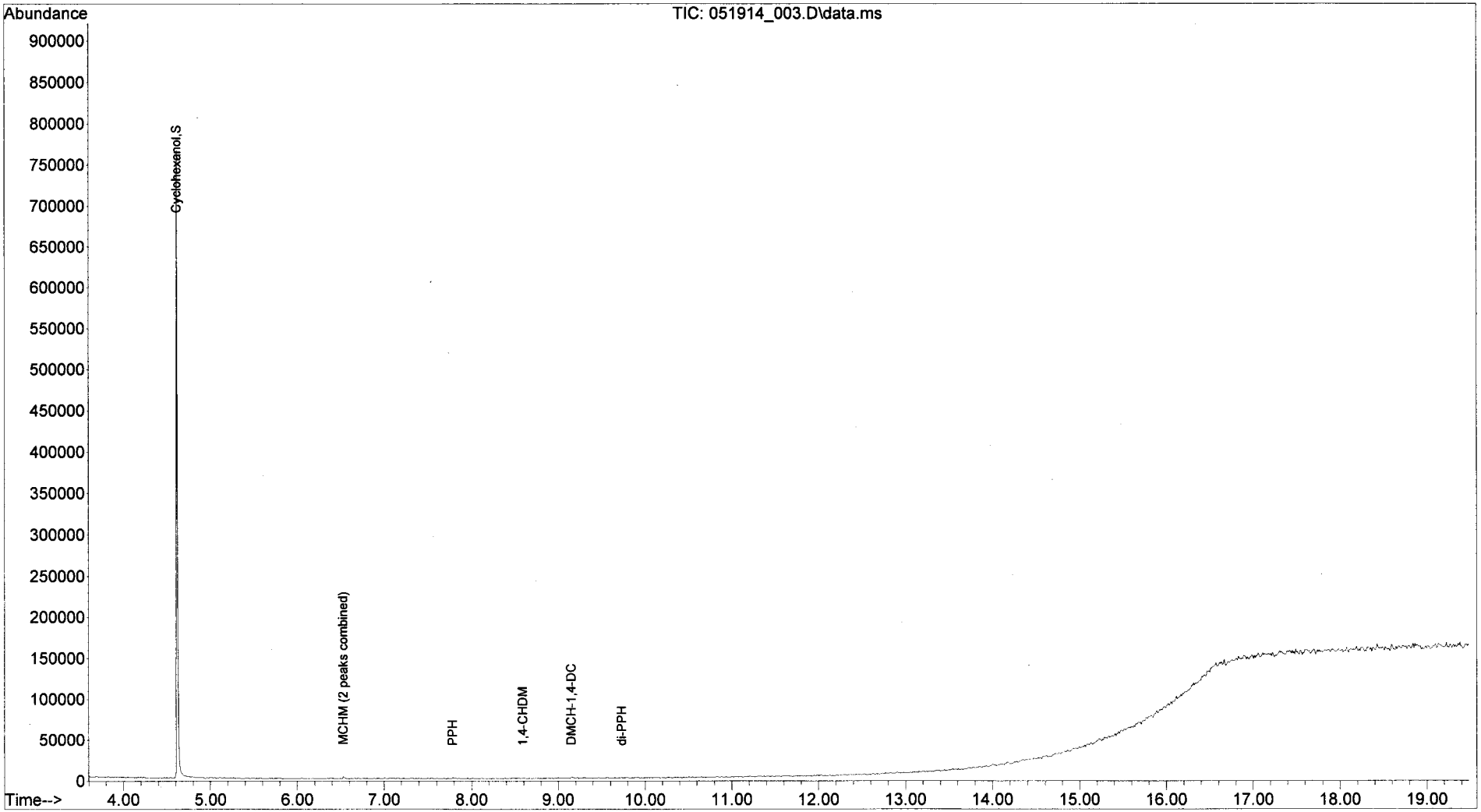
Compound	(b) (7)(C)		Response	Conc	Units	Dev(Min)
System Monitoring Compounds						
1) Cyclohexanol	4.613	57	156539	48.53	ug/mL	0.00
Target Compounds						Qvalue
2) MCHM (2 peaks combined)	6.530	55	842m	2.86	ug/mL	
3) PPH	7.784	94	548m	4.27	ug/mL	
4) 1,4-CHDM	8.592	95	280m	4.08	ug/mL	
5) DMCH-1,4-DC	9.152	81	646m	3.18	ug/mL	
6) di-PPH	9.732	59	401m	2.77	ug/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA[redacted]RP1581\
Data File : 051914_003.D
Acq On : 19 May 2014 12:55 pm
Operator : [redacted]
Sample : 0.5 ug/mL
Misc : 0.5
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 06 11:40:07 2014
Quant Method : C:\msdchem\1\METHODS[redacted]RP1581_051914.M
Quant Title : Freedom Industies
QLast Update : Wed Aug 06 11:32:39 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\(b) (7)(C)\RP1581\
Data File : 051914_004.D
Acq On : 19 May 2014 1:28 pm
Operator : (b) (7)(C)
Sample : 1 ug/mL
Misc : 1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 11:41:21 2014
Quant Method : C:\msdchem\1\METHODS\(b) (7)(C)RP1581_051914.M
Quant Title : Freedom Industies
QLast Update : Wed Aug 06 11:32:39 2014
Response via : Initial Calibration

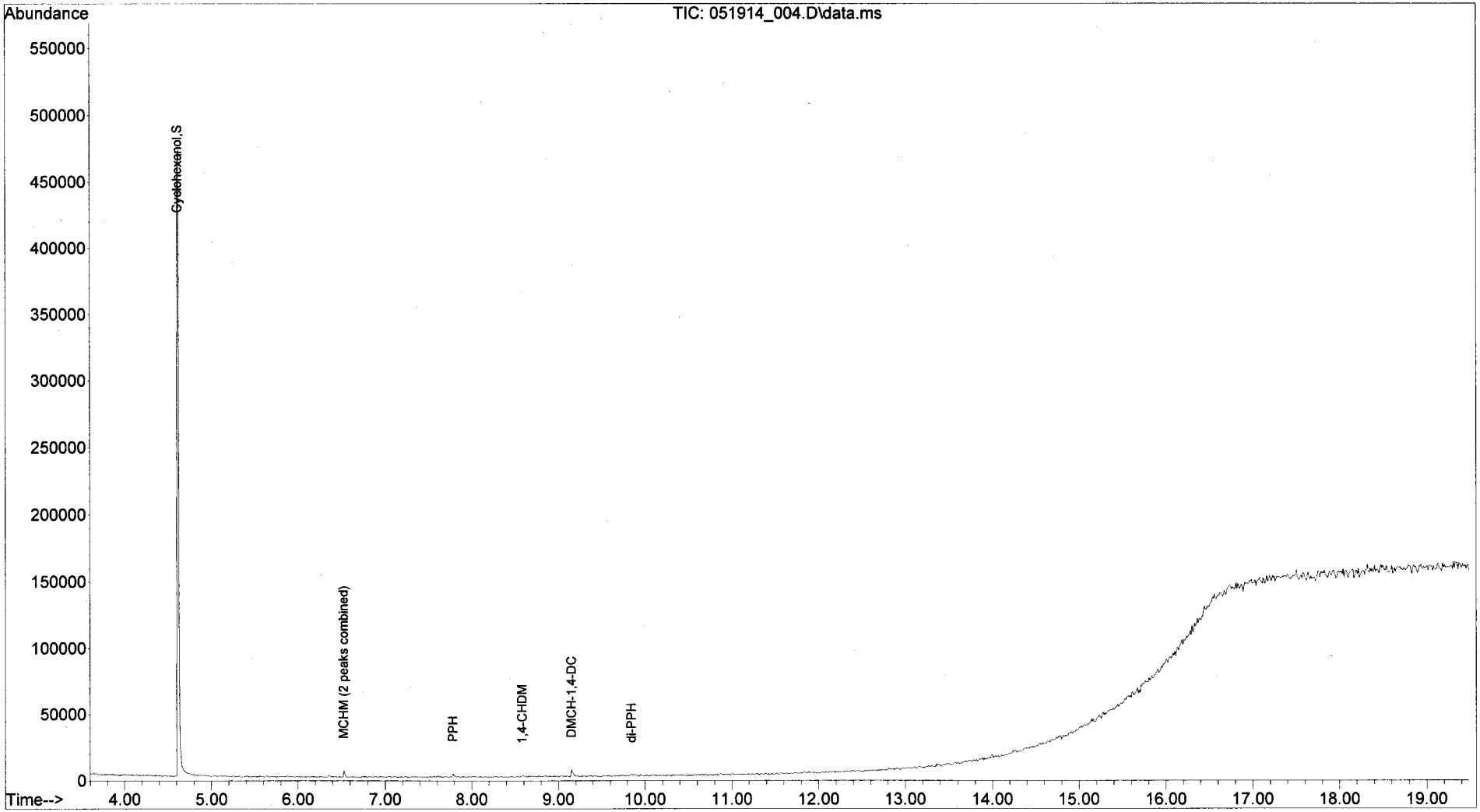
Compound	(b) (7)(C)		Response	Conc	Units	Dev(Min)
System Monitoring Compounds						
1) Cyclohexanol	4.613	57	155813	48.30	ug/mL	0.00
Target Compounds						Qvalue
2) MCHM (2 peaks combined)	6.530	55	2156m	3.18	ug/mL	
3) PPH	7.784	94	1506m	4.45	ug/mL	
4) 1,4-CHDM	8.582	95	545m	4.20	ug/mL	
5) DMCH-1,4-DC	9.152	81	1398m	3.41	ug/mL	
6) di-PPH	9.846	59	1017m	3.04	ug/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA[redacted]\RP1581\
Data File : 051914_004.D
Acq On : 19 May 2014 1:28 pm
Operator : [redacted]
Sample : 1 ug/mL
Misc : 1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 11:41:21 2014
Quant Method : C:\msdchem\1\METHODS\[redacted]RP1581_051914.M
Quant Title : Freedom Industies [redacted]
QLast Update : Wed Aug 06 11:32:39 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA[redacted]RP1581\
Data File : 051914_005.D
Acq On : 19 May 2014 2:00 pm
Operator : [redacted]
Sample : [redacted]g/mL
Misc : 3
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 06 11:42:27 2014
Quant Method : C:\msdchem\1\METHODS[redacted]RP1581_051914.M
Quant Title : Freedom Industies
QLast Update : Wed Aug 06 11:32:39 2014
Response via : Initial Calibration

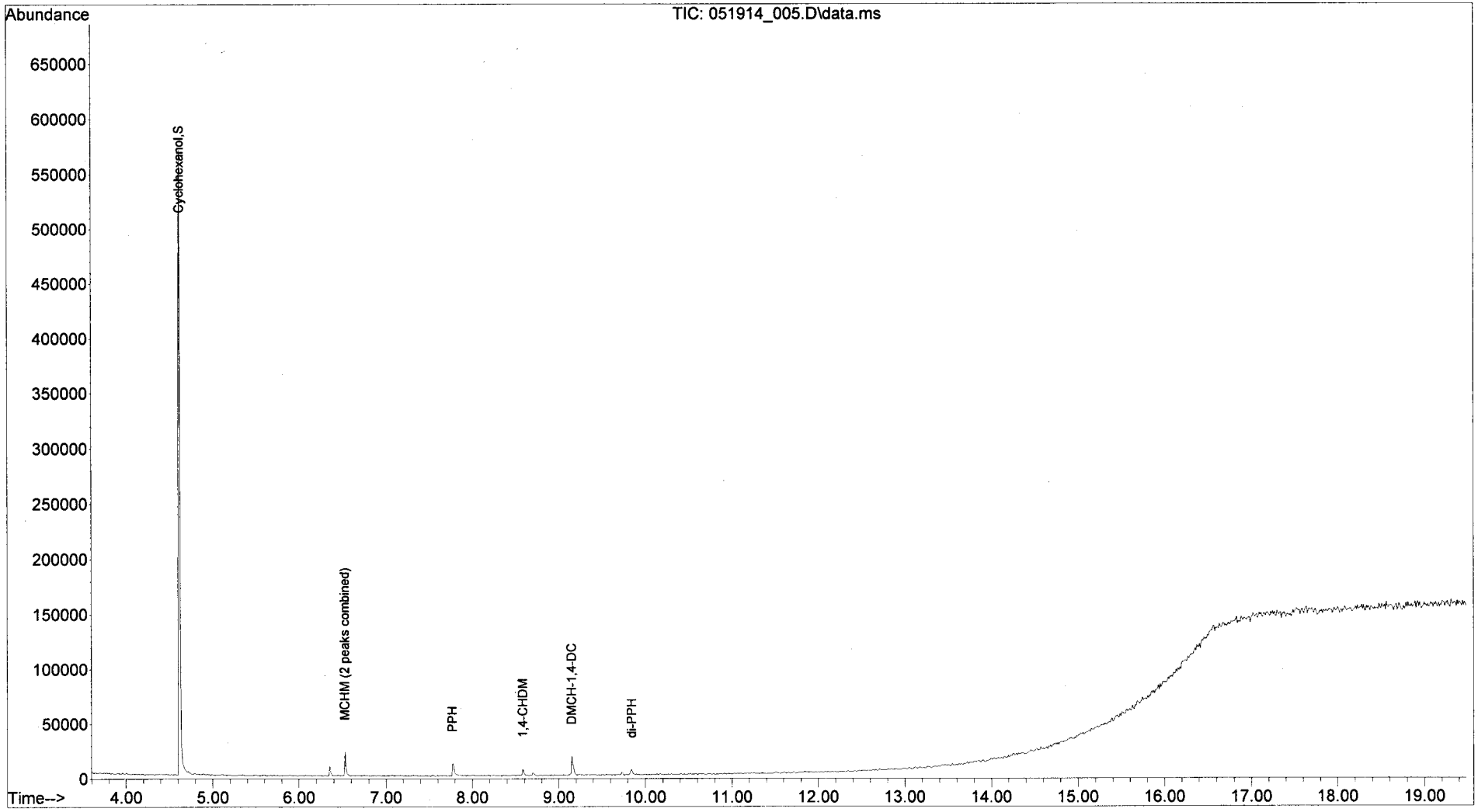
Compound	[redacted]		Response	Conc	Units	Dev(Min)
System Monitoring Compounds						
1) Cyclohexanol	4.623	57	169255	52.47	ug/mL	0.01
Target Compounds						Qvalue
2) MCHM (2 peaks combined)	6.530	55	7148m	4.37	ug/mL	
3) PPH	7.774	94	6493m	5.38	ug/mL	
4) 1,4-CHDM	8.582	95	2435m	5.07	ug/mL	
5) DMCH-1,4-DC	9.152	81	5114m	4.51	ug/mL	
6) di-PPH	9.846	59	3031m	3.94	ug/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\[redacted]RP1581\
Data File : 051914_005.D
Acq On : 19 May 2014 2:00 pm
Operator : [redacted]
Sample : 3 ug/mL
Misc : 3
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 06 11:42:27 2014
Quant Method : C:\msdchem\1\METHODS\[redacted]_RP1581_051914.M
Quant Title : Freedom Industies
QLast Update : Wed Aug 06 11:32:39 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA(b) (7)(C) \RP1581\
Data File : 051914_006.D
Acq On : 19 May 2014 2:32 pm
Operator : (b) (7)
Sample : 5 ug/ml
Misc : 5
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 06 11:43:33 2014
Quant Method : C:\msdchem\1\METHODS\(b) _RP1581_051914.M
Quant Title : Freedom Industies
QLast Update : Wed Aug 06 11:32:39 2014
Response via : Initial Calibration

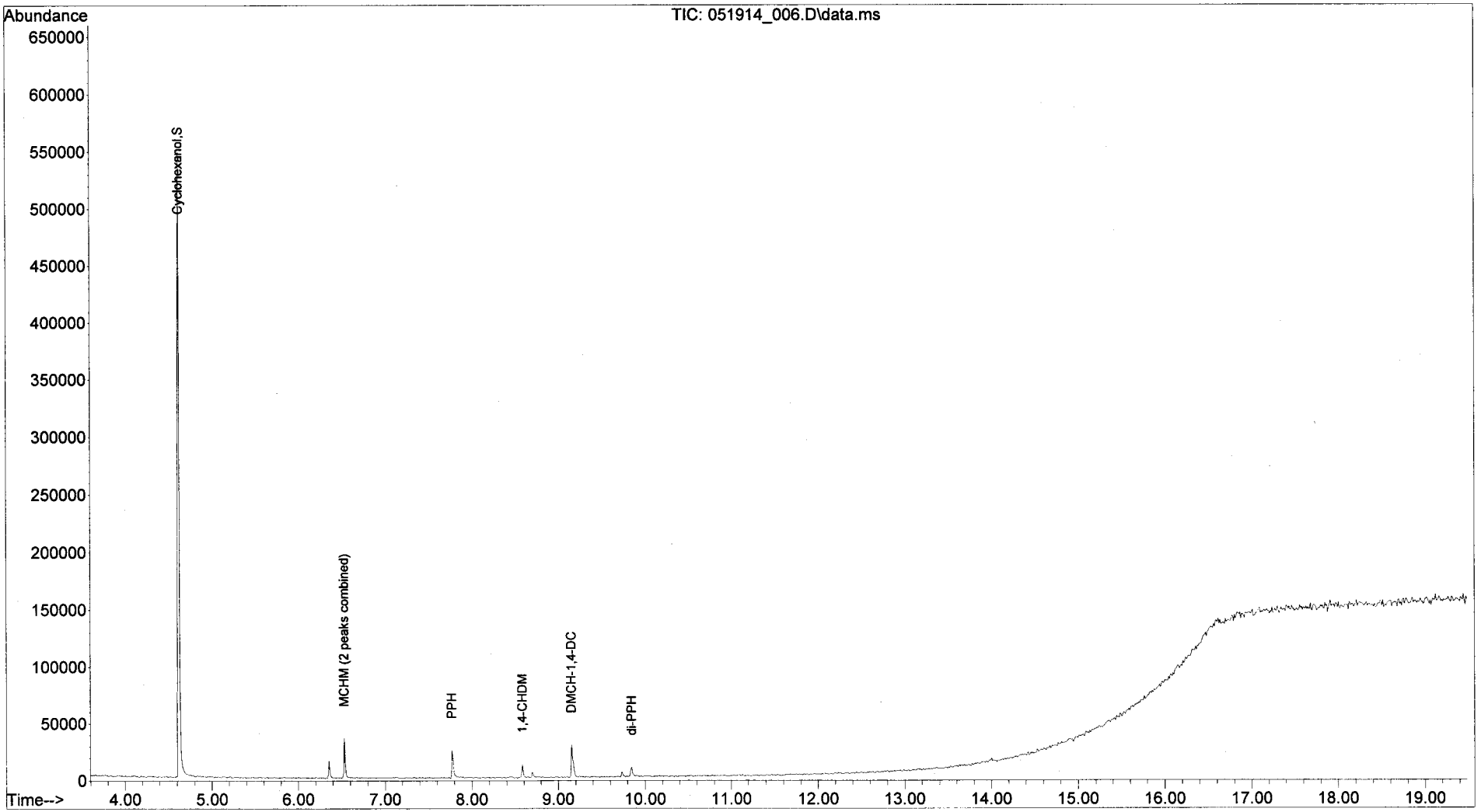
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
System Monitoring Compounds						
1) Cyclohexanol	4.623	57	157595	48.86	ug/mL	0.01
Target Compounds						Qvalue
2) MCHM (2 peaks combined)	6.530	55	10861m	5.26	ug/mL	
3) PPH	7.774	94	10474m	6.12	ug/mL	
4) 1,4-CHDM	8.582	95	4360m	5.95	ug/mL	
5) DMCH-1,4-DC	9.152	81	7673m	5.27	ug/mL	
6) di-PPH	9.846	59	4799m	4.73	ug/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\(b) (7)(C) RP1581\
Data File : 051914_006.D
Acq On : 19 May 2014 2:32 pm
Operator : (b) (7)(C)
Sample : 5 ug/ml
Misc : 5
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 06 11:43:33 2014
Quant Method : C:\msdchem\1\METHODS\(b) (7) P1581_051914.M
Quant Title : Freedom Industies
QLast Update : Wed Aug 06 11:32:39 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA[redacted]\RP1581\
Data File : 051914_007.D
Acq On : 19 May 2014 3:04 pm
Operator : [redacted]
Sample : 10 ug/mL
Misc : 10
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 06 11:44:19 2014
Quant Method : C:\msdchem\1\METHODS\[redacted]RP1581_051914.M
Quant Title : Freedom Industies
QLast Update : Wed Aug 06 11:32:39 2014
Response via : Initial Calibration

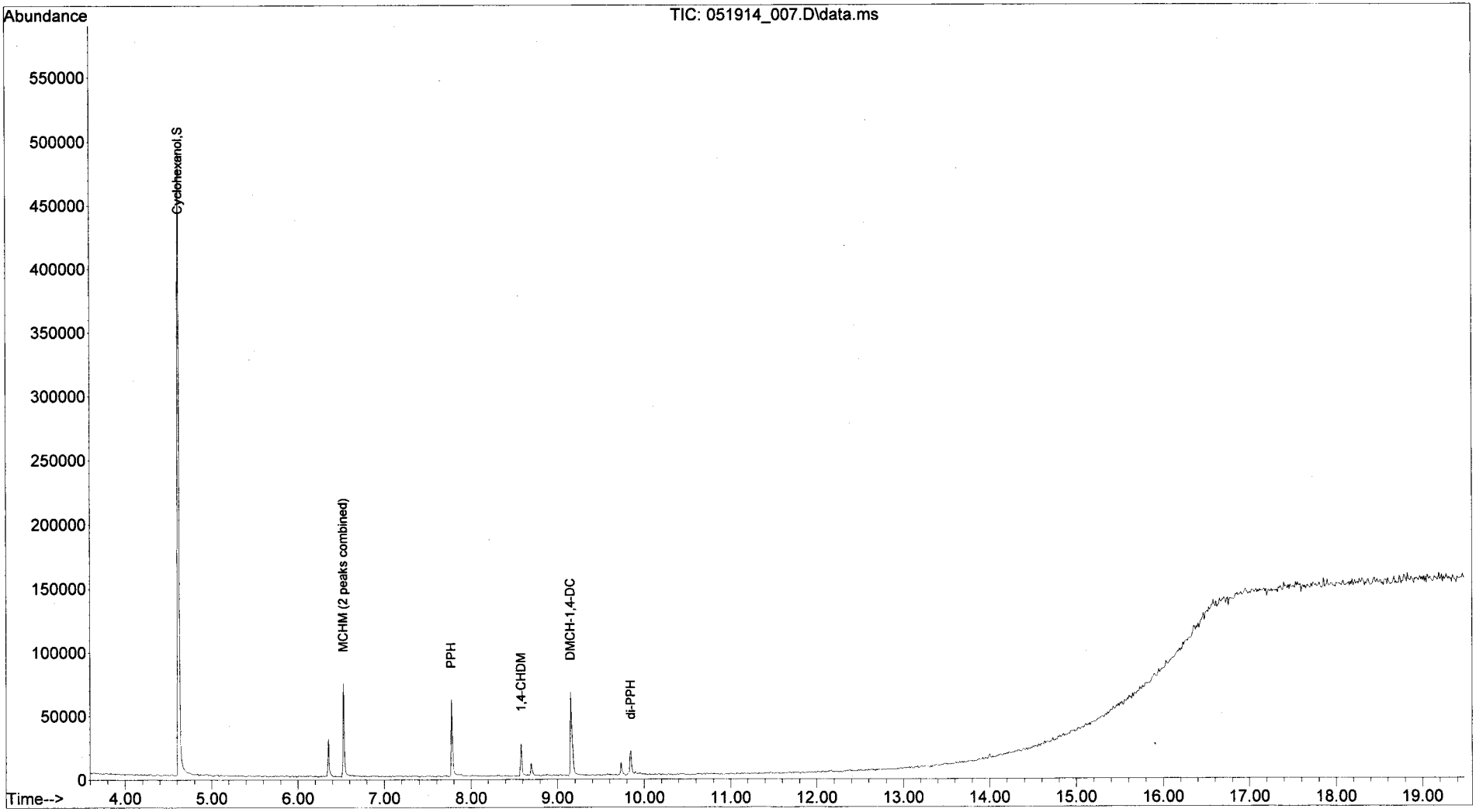
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
System Monitoring Compounds						
1) Cyclohexanol	4.623	57	151352	46.92	ug/mL	0.01
Target Compounds						Qvalue
2) MCHM (2 peaks combined)	6.530	55	22258m	8.00	ug/mL	
3) PPH	7.774	94	21573	8.19	ug/mL#	55
4) 1,4-CHDM	8.582	95	8585m	7.90	ug/mL	
5) DMCH-1,4-DC	9.152	81	18423m	8.46	ug/mL	
6) di-PPH	9.846	59	11129m	7.55	ug/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA[redacted]RP1581\
Data File : 051914_007.D
Acq On : 19 May 2014 3:04 pm
Operator [redacted]
Sample : 10 ug/mL
Misc : 10
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 06 11:44:19 2014
Quant Method : C:\msdchem\1\METHODS[redacted]RP1581_051914.M
Quant Title : Freedom Industies
QLast Update : Wed Aug 06 11:32:39 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\[redacted]RP1581\
Data File : 051914_008.D
Acq On : 19 May 2014 3:36 pm
Operator :[redacted]
Sample : 50 ug/mL
Misc : 50
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 06 11:45:25 2014
Quant Method : C:\msdchem\1\METHODS\AMH_RP1581_051914.M
Quant Title : Freedom Industies
QLast Update : Wed Aug 06 11:32:39 2014
Response via : Initial Calibration

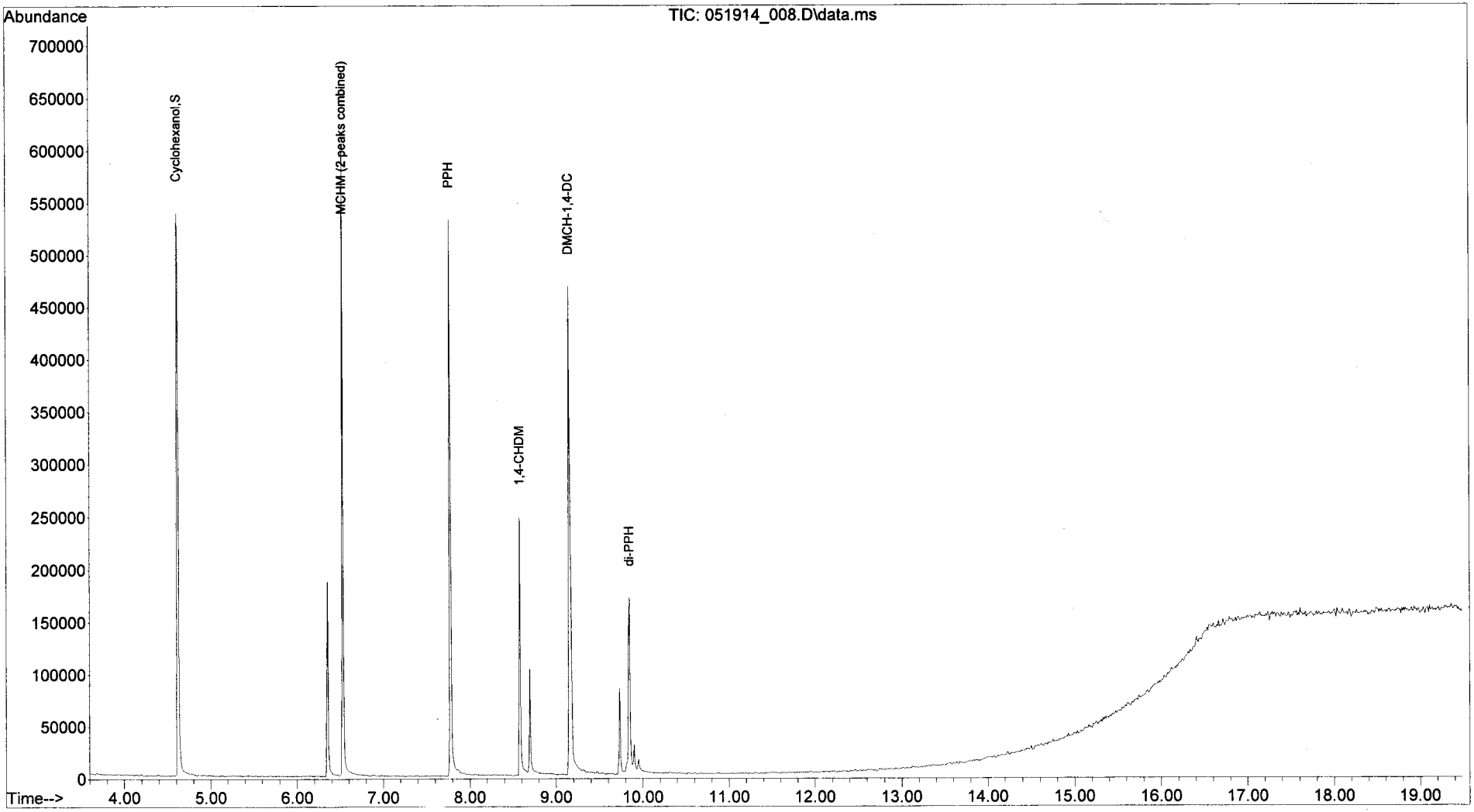
Compound	[redacted]		Response	Conc	Units	Dev(Min)
System Monitoring Compounds						
1) Cyclohexanol	4.613	57	168333	52.19	ug/mL	0.00
Target Compounds						Qvalue
2) MCHM (2 peaks combined)	6.530	55	163896m	41.96	ug/mL	
3) PPH	7.773	94	189499	39.50	ug/mL	94
4) 1,4-CHDM	8.582	95	74607m	38.26	ug/mL	
5) DMCH-1,4-DC	9.152	81	130770	41.79	ug/mL#	91
6) di-PPH	9.846	59	83192m	39.69	ug/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA[redacted]\RP1581\
Data File : 051914_008.D
Acq On : 19 May 2014 3:36 pm
Operator : [redacted]
Sample : 50 ug/mL
Misc : 50
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 06 11:45:25 2014
Quant Method : C:\msdchem\1\METHODS[redacted]_RP1581_051914.M
Quant Title : Freedom Industies
QLast Update : Wed Aug 06 11:32:39 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\[redacted]RP1581\
Data File : 051914_009.D
Acq On : 19 May 2014 4:09 pm
Operator : [redacted]
Sample : 100 ug/mL
Misc : 100
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 06 11:46:47 2014
Quant Method : C:\msdchem\1\METHODS\[redacted]P1581_051914.M
Quant Title : Freedom Industies
QLast Update : Wed Aug 06 11:32:39 2014
Response via : Initial Calibration

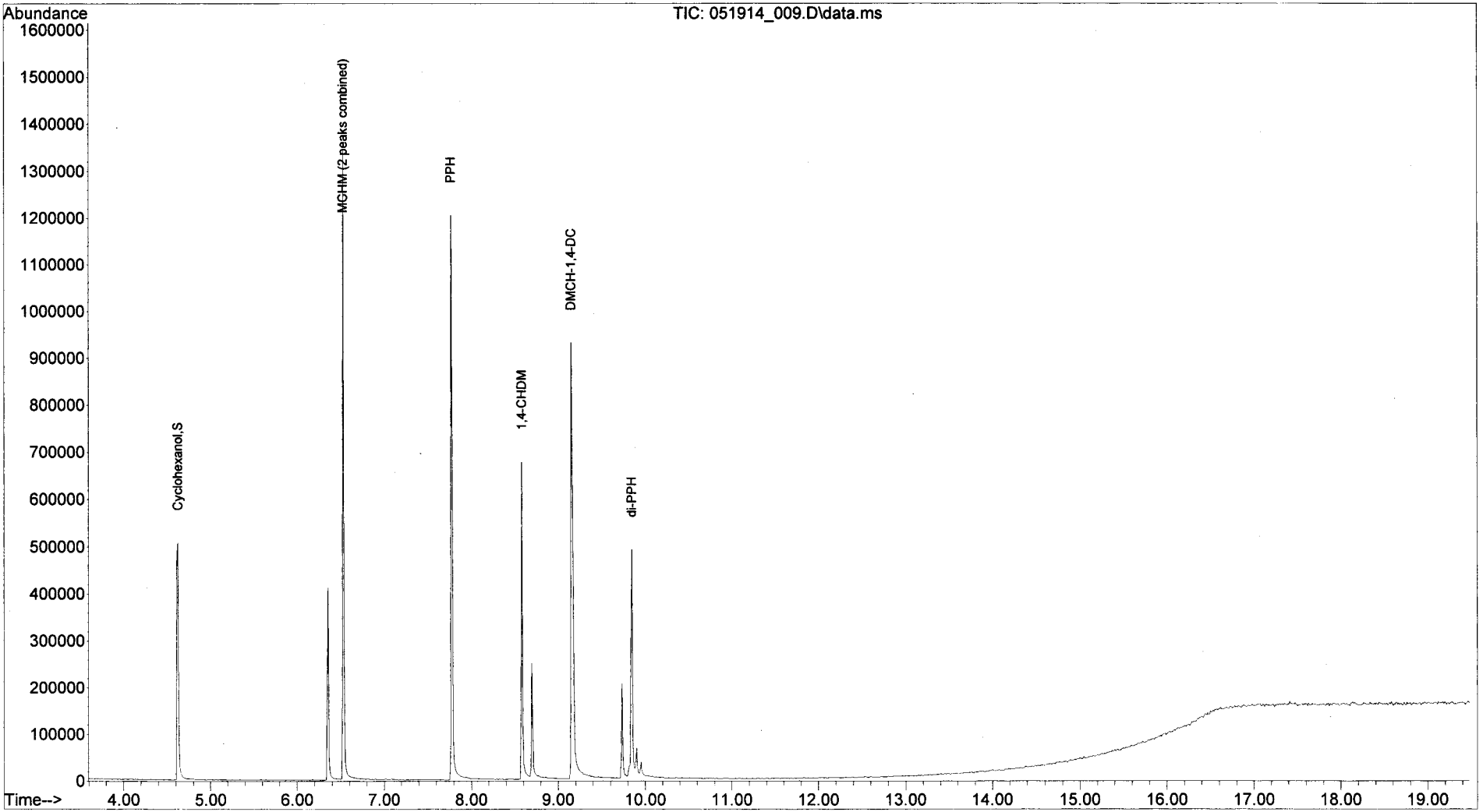
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
System Monitoring Compounds						
1) Cyclohexanol	4.623	57	167242	51.85	ug/mL	0.01
Target Compounds						Qvalue
2) MCHM (2 peaks combined)	6.530	55	367546m	90.81	ug/mL	
3) PPH	7.774	94	441478	86.47	ug/mL	95
4) 1,4-CHDM	8.582	95	186886m	89.89	ug/mL	
5) DMCH-1,4-DC	9.152	81	293609	90.11	ug/mL#	91
6) di-PPH	9.846	59	214165m	98.11	ug/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\(b) (7)(C) RP1581\
Data File : 051914_009.D
Acq On : 19 May 2014 4:09 pm
Operator : (b)
Sample : 100 ug/mL
Misc : 100
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 06 11:46:47 2014
Quant Method : C:\msdchem\1\METHODS\(b) (7) RP1581_051914.M
Quant Title : Freedom Industies
QLast Update : Wed Aug 06 11:32:39 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA[redacted]\RP1581\
Data File : 051914_010.D
Acq On : 19 May 2014 4:42 pm
Operator [redacted]
Sample [redacted]g/mL
Misc : 200
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 06 11:47:37 2014
Quant Method : C:\msdchem\1\METHODS[redacted]_RP1581_051914.M
Quant Title : Freedom Industies
QLast Update : Wed Aug 06 11:32:39 2014
Response via : Initial Calibration

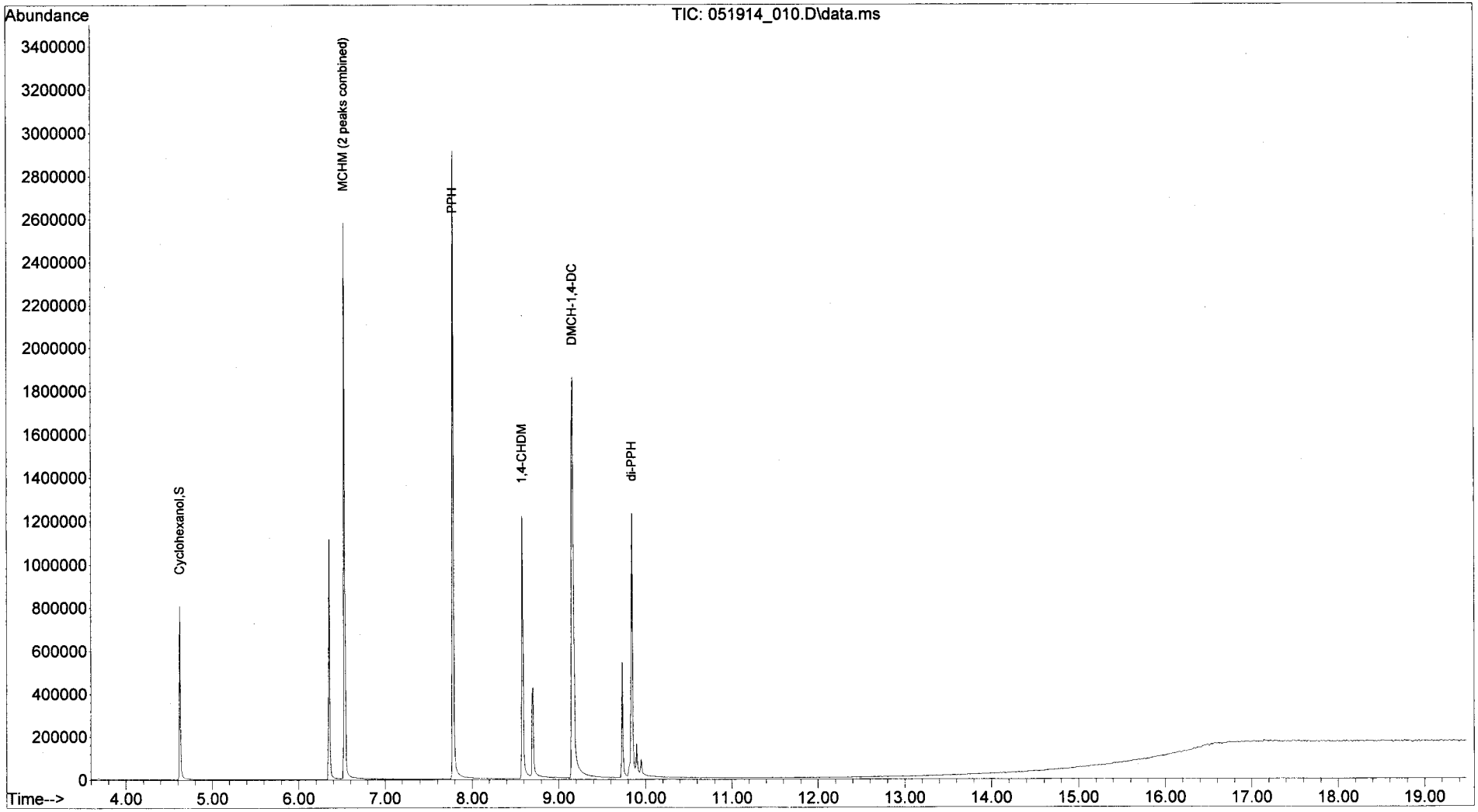
Compound	[redacted]		Response	Conc	Units	Dev(Min)
System Monitoring Compounds						
1) Cyclohexanol	4.623	57	163415	50.66	ug/mL	0.01
Target Compounds						Qvalue
2) MCHM (2 peaks combined)	6.530	55	789712m	192.05	ug/mL	
3) PPH	7.784	94	1023617	194.99	ug/mL	96
4) 1,4-CHDM	8.582	95	410254m	192.61	ug/mL	
5) DMCH-1,4-DC	9.162	81	639126	192.62	ug/mL#	92
6) di-PPH	9.846	59	527324m	237.79	ug/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\(b) (7)(C) RP1581\
Data File : 051914_010.D
Acq On : 19 May 2014 4:42 pm
Operator : (b)
Sample : 200 ug/mL
Misc : 200
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 06 11:47:37 2014
Quant Method : C:\msdchem\1\METHODS\(b) (7)(C)_RP1581_051914.M
Quant Title : Freedom Industies
QLast Update : Wed Aug 06 11:32:39 2014
Response via : Initial Calibration



METHOD CONTROL PARAMETERS

Method Information For: C:\MSDCHEM\1\METHODS\(b) (7) (C) RP1581.M
Method Sections To Run:

( ) Save Copy of Method With Data
( ) Instrument Control Pre-Run Cmd/Macro =
( ) Data Analysis Pre-Run Cmd/Macro =
(X) Data Acquisition
(X) Data Analysis
( ) Instrument Control Post-Run Cmd/Macro =
( ) Data Analysis Post-Run Cmd/Macro =
Method Comments:

END OF METHOD CONTROL PARAMETERS

INSTRUMENT CONTROL PARAMETERS: Instrument 1

C:\MSDCHEM\1\METHODS(b) (7) RP1581.M
Thu Jun 05 14:28:38 2014

Control Information

Sample Inlet	: GC
Injection Source	: GC ALS
Mass Spectrometer	: Enabled

Oven

Equilibration Time	0.5 min
Oven Program	On
35 °C for 2 min	
then 20 °C/min to 325 °C for 3 min	
Run Time	19.5 min

Front Injector

Syringe Size	10 µL
Injection Volume	1 µL
Injection Repetitions	1
Solvent A Washes (PreInj)	2
Solvent A Washes (PostInj)	3
Solvent A Volume	8 µL
Solvent B Washes (PreInj)	2
Solvent B Washes (PostInj)	3
Solvent B Volume	8 µL
Sample Washes	1
Sample Wash Volume	8 µL
Sample Pumps	3
Dwell Time (PreInj)	0 min
Dwell Time (PostInj)	0 min
Solvent Wash Draw Speed	300 µL/min
Solvent Wash Dispense Speed	6000 µL/min
Sample Wash Draw Speed	300 µL/min
Sample Wash Dispense Speed	6000 µL/min
Injection Dispense Speed	6000 µL/min
Viscosity Delay	0 sec
Sample Depth Disabled	

Back Injector

Front SS Inlet He

Mode	Split	
Heater	On	275 °C
Pressure	On	16.494 psi
Total Flow	On	47.305 mL/min
Septum Purge Flow	On	3 mL/min
Gas Saver	On	30 mL/min After 2 min
Split Ratio	20	:1
Split Flow	42.195	mL/min

Back SS Inlet He

Mode	Split
Heater	Off
Pressure	Off
Total Flow	Off
Septum Purge Flow	Off
Gas Saver	Off
Split Ratio	100 :1

Split Flow	0 mL/min

Thermal Aux 2 {MSD Transfer Line}

Heater	On
Temperature Program	On
280 °C for 0 min	
Run Time	19.5 min

Column #1
DB-5ms: 1653.60651
DB-5ms
325 °C: 30 m x 250 µm x 0.25 µm
In: Front SS Inlet He
Out: Vacuum

(Initial)	35 °C
Pressure	16.494 psi
Flow	2.1098 mL/min
Average Velocity	52.535 cm/sec
Holdup Time	0.95175 min
Flow Program	Off
2.1098 mL/min for 0 min	
Run Time	19.5 min

Front Detector µECD

Heater	On	300 °C
Anode Flow	Off	
Makeup Flow	On	20 mL/min
Const Col + Makeup	Off	
Electrometer	Off	

Aux Pressure 1 He

Pressure Program	Off
10 psi for 0 min	
Run Time	19.5 min

Aux Pressure 2 He

Pressure Program	Off
10 psi for 0 min	
Run Time	19.5 min

Aux Pressure 3 He

Pressure Program	Off
10 psi for 0 min	
Run Time	19.5 min

Signals

Front Signal	Save Off
Back Inlet	Save Off
Test Plot	Save Off
Test Plot	Save Off

MS ACQUISITION PARAMETERS

General Information

Tune File : dftppnew051614.u
Acquistion Mode : Scan

(b) (7) Information

Solvent Delay : 3.50 min

EMV Mode : Relative
Relative Voltage : -71
Resulting EM Voltage : 1812

[Scan Parameters]

Low Mass : 35.0
High Mass : 500.0
Threshold : 50
Sample # : 3 A/D Samples 8
Plot 2 low mass : 50.0
Plot 2 high mass : 550.0

[MSZones]

MS Source : 230 C maximum 250 C
MS Quad : 150 C maximum 200 C

END OF MS ACQUISITION PARAMETERS

TUNE PARAMETERS for SN: US73347311

Trace Ion Detection is OFF.

EMISSION : 34.610
ENERGY : 69.922
REPELLER : 22.249
IONFOCUS : 90.157
ENTRANCE_LE : 0.000
EMVOLTS : 1882.353
Actual EMV : 1811.77
GAIN FACTOR : 2.25
AMUGAIN : 2075.000
AMUOFFSET : 126.750
FILAMENT : 1.000
DCPOLARITY : 0.000
ENTLENSOFFS : 17.318@ 3 17.318@ 50 15.310@ 69 13.302@131 13.804
@219 14.055@414 14.055@502 14.055@1049
MASSGAIN : -453.000
MASSOFFSET : -39.000

END OF TUNE PARAMETERS

END OF INSTRUMENT CONTROL PARAMETERS

DATA ANALYSIS PARAMETERS

Method Name: C:\MSDCHEM\1\METHODS\(b) (7) (C)RP1581.M

Percent Report Settings

Sort By: Signal

Output Destination
    Screen: No
    Printer: No
    File: No

Integration Events: Meth Default

Generate Report During Run Method: Yes

Signal Correlation Window: 0.020

Qualitative Report Settings

Peak Location of Unknown: Apex

Library to Search	Minimum Quality
C:\Database\NIST05a.L	0

Integration Events: Meth Default

Report Type: Summary

Output Destination
    Screen: No
    Printer: No
    File: No

Generate Report During Run Method: Yes

Quantitative Report Settings

Report Type: Detailed

Output Destination
    Screen: No
    Printer: No
    File: epatemp.txt

Generate Report During Run Method: No

Freedom Industies
Calibration Last Updated: Tue Jun 03 14:32:34 2014

Reference Window: 2.00 Minutes
Non-Reference Window: 1.00 Minutes

Correlation Window: 0.10 minutes
Default Multiplier: 1.00
Default Sample Concentration: 0.00

Compound Information

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1) Cyclohexanol ( )

Ret. Time 4.613 min., Extract & Integrate from 4.113 to 5.113 min.

Signal		Rel Resp.	Pct. Unc.(rel)	Integration
Tgt	57.10			*** METH DEFAULT ***
Q1	82.10	57.10	20.0	*** METH DEFAULT ***
Q2	67.10	43.80	20.0	*** METH DEFAULT ***

Lvl	ID	Conc (ug/mL)	Response
1		50.000	156539
2		50.000	155813
3		50.000	169255
4		50.000	157595
5		50.000	151352
6		50.000	168333
7		50.000	167242
8		50.000	163415

Qualifier Peak Analysis ON
Curve Fit: Avg. RF

---

2) MCHM (2 peaks combined) ( )

Ret. Time 6.530 min., Extract & Integrate from 6.030 to 7.030 min.

Signal		Rel Resp.	Pct. Unc.(rel)	Integration
Tgt	55.10			*** METH DEFAULT ***
Q1	97.10	39.40	20.0	*** METH DEFAULT ***
Q2	81.10	30.30	20.0	*** METH DEFAULT ***

Lvl	ID	Conc (ug/mL)	Response
1		0.500	653
2		1.000	1464
3		3.000	4958
4		5.000	7581
5		10.000	15368
6		50.000	118295
7		100.000	265510
8		200.000	550216

Qualifier Peak Analysis ON
Curve Fit: Linear

---

3) PPH ( )

Ret. Time 7.784 min., Extract & Integrate from 7.284 to 8.284 min.

Signal		Rel Resp.	Pct. Unc.(rel)	Integration
Tgt	94.10			*** METH DEFAULT ***
Q1	77.10	23.70	20.0	*** METH DEFAULT ***
Q2	152.10	18.60	20.0	*** METH DEFAULT ***

Lvl	ID	Conc (ug/mL)	Response
1		0.500	548
2		1.000	1506
3		3.000	6257
4		5.000	10053
5		10.000	21573
6		50.000	189499
7		100.000	441478
8		200.000	1023617

Qualifier Peak Analysis ON
Curve Fit: Linear

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4) 1,4-CHDM ( )

Ret. Time 8.592 min., Extract & Integrate from 8.092 to 9.092 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 95.10			*** METH DEFAULT ***
Q1 67.10	41.40	20.0	*** METH DEFAULT ***
Q2 41.10	53.20	20.0	*** METH DEFAULT ***

Lvl	ID	Conc (ug/mL)	Response
1		0.500	280
2		1.000	545
3		3.000	1859
4		5.000	3449
5		10.000	6555
6		50.000	58043
7		100.000	147139
8		200.000	315052

Qualifier Peak Analysis ON
Curve Fit: Linear

---

5) DMCH-1,4-DC ( )

Ret. Time 9.152 min., Extract & Integrate from 8.652 to 9.652 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 81.10			*** METH DEFAULT ***
Q1 108.10	36.20	20.0	*** METH DEFAULT ***
Q2 140.10	63.60	20.0	*** METH DEFAULT ***

Lvl	ID	Conc (ug/mL)	Response
1		0.500	646
2		1.000	1399
3		3.000	5113
4		5.000	7673
5		10.000	17864
6		50.000	130770
7		100.000	293609
8		200.000	639126

Qualifier Peak Analysis ON
Curve Fit: Linear

---

6) di-PPH ( )

Ret. Time 9.856 min., Extract & Integrate from 9.356 to 10.356 min.

Signal	Rel Resp.	Pct. Unc.(rel)	Integration
Tgt 59.10			*** METH DEFAULT ***
Q1 94.10	30.00	20.0	*** METH DEFAULT ***
Q2 210.20	9.00	20.0	*** METH DEFAULT ***

Lvl	ID	Conc (ug/mL)	Response
1		0.500	221
2		1.000	726
3		3.000	2147
4		5.000	3145
5		10.000	7351
6		50.000	58083
7		100.000	154086
8		200.000	375689

Qualifier Peak Analysis ON
Curve Fit: Linear

END OF DATA ANALYSIS PARAMETERS

Thu Jun 05 14:28:39 2014